



# Group Discussion: MoM and Scenarios

23 April 2002

## Report Documentation Page

*Form Approved  
OMB No. 0704-0188*

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1. REPORT DATE <b>00 DEC 2003</b>	2. REPORT TYPE <b>N/A</b>	3. DATES COVERED <b>-</b>
4. TITLE AND SUBTITLE <b>Group Discussion on "MoM and Scenarios"</b>		
5a. CONTRACT NUMBER <b></b>		
5b. GRANT NUMBER <b></b>		
5c. PROGRAM ELEMENT NUMBER <b></b>		
6. AUTHOR(S) <b></b>		
5d. PROJECT NUMBER <b></b>		
5e. TASK NUMBER <b></b>		
5f. WORK UNIT NUMBER <b></b>		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>TNO-FEL TNO Physics and Electronics Laboratory P.O. Box 96864 2509 JG The Hague THE NETHERLANDS</b>		
8. PERFORMING ORGANIZATION REPORT NUMBER <b></b>		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) <b></b>		
10. SPONSOR/MONITOR'S ACRONYM(S) <b></b>		
11. SPONSOR/MONITOR'S REPORT NUMBER(S) <b></b>		
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release, distribution unlimited</b>		
13. SUPPLEMENTARY NOTES <b>See also ADM001657., The original document contains color images.</b>		
14. ABSTRACT		
15. SUBJECT TERMS		
16. SECURITY CLASSIFICATION OF:  a. REPORT <b>unclassified</b>		
b. ABSTRACT <b>unclassified</b>		
c. THIS PAGE <b>unclassified</b>		
17. LIMITATION OF ABSTRACT <b>UU</b>	18. NUMBER OF PAGES <b>20</b>	19a. NAME OF RESPONSIBLE PERSON <b></b>

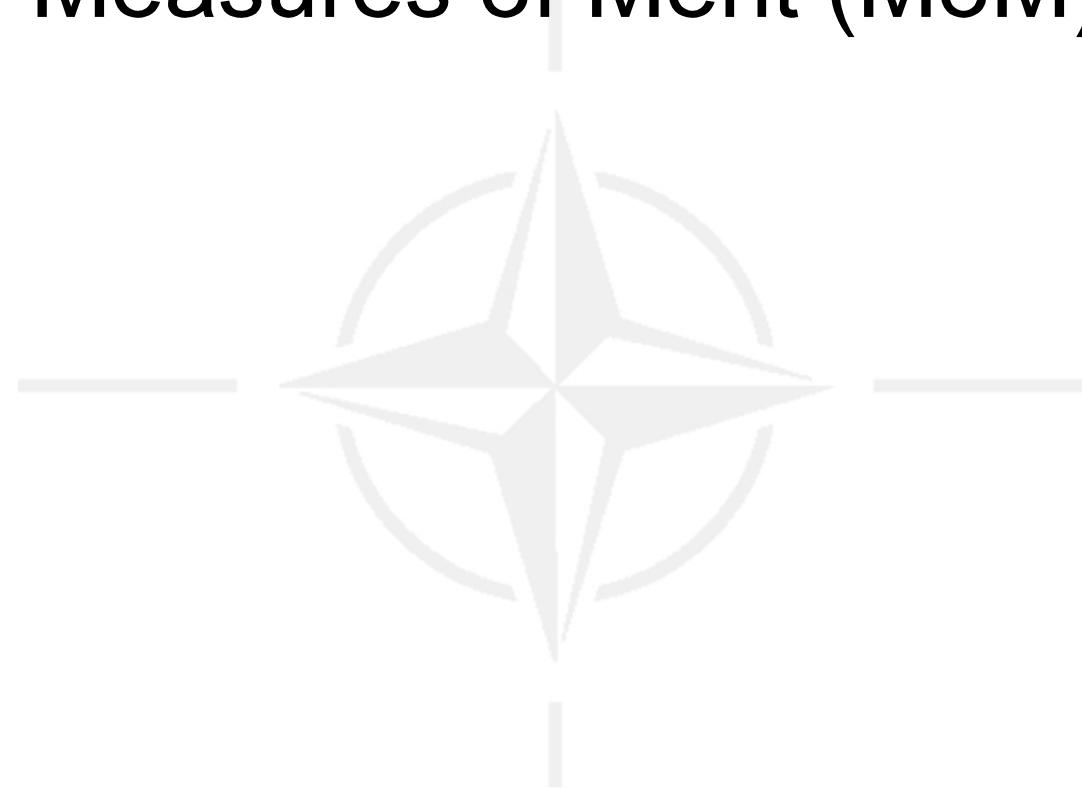


# Goals of group discussion

- Elicit how the draft CoBP might be
  - Added to
  - Subtracted from
  - Modified
- Identify steps that might be taken to further illuminate or clarify the subject
- Identify key issues that might be the subject of future SAS panels



# Measures of Merit (MoM)

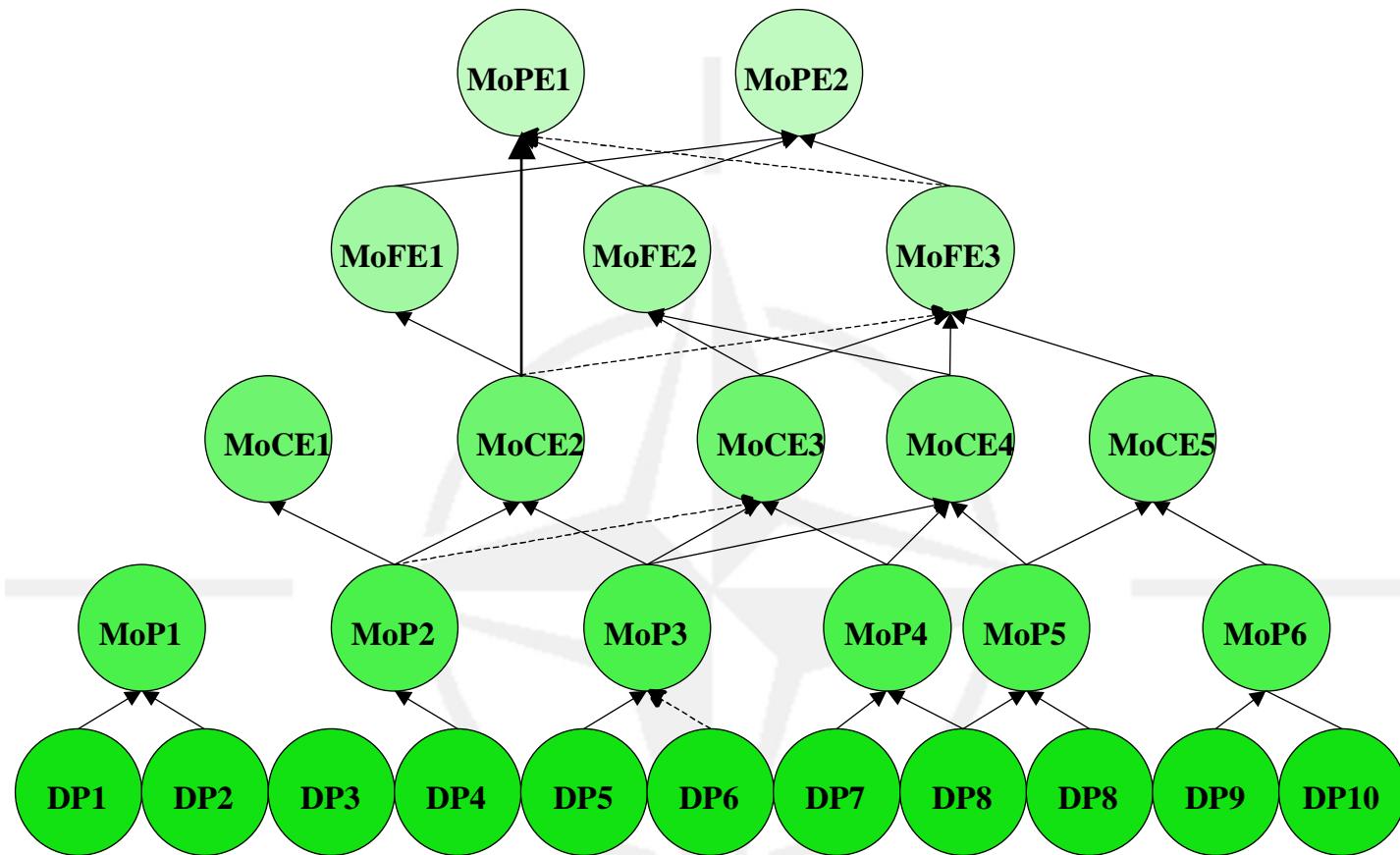




## Five levels of MoM

- MoPE: Measures of Policy Effectiveness
- MoFE: Measures of Force Effectiveness
- MoCE: Measures of C2 Effectiveness
- MoP: Measures of Performance
- DP: Dimensional Parameters

# Linked MoMs



*Can relationships be established?*

# MoM Characteristics

MoM	Focus	Scenario	Effort Required	Number	Impact	Compre-hension	Generaliz-ability
MoPE	Outcome	Dependent	High	Few	High	Policy	Low
MoFE	Mission						
MoCE	C3I						
MoP	Systems						
DP	Process	Independent	Low	Many	Limited	Technical	High

*Agree or disagree?*



# Conclusions

- No single measure or methodology exists for assessing overall effectiveness of C&C
- A multi-method, multi-phase approach is necessary

*Agree or disagree?*



# Recommendations

- Plan with clear objectives
- State assumptions, constraints
- Formally assess reliability and validity
- Concentrate on MoCE and MoP
- Incorporate MoM data gathering into system design
- Include Subject Matter Experts in assessments
- Retain data as benchmarks for future comparison

*Agree or disagree?*



## Challenges / Issues

- Linkage of DP-MoP-MoCE-MoFE
- Interpretation of measures
- Environmental components
- Reliability and validity
- Uncertainties - scenario, model, outcomes
- Human-in-the-loop
- Cost and convenience
- Modelling

*Comments?*



# Summary MoM

- Comments?
- Questions?
- Areas of concern?



# Scenarios





## Four elements

- (geopolitical) context
- participants
- environment
- evolution of events in time

*Any other?*

## Six prerequisites should be met

*It should:*

- be approved for the assessment
- reflect the factors that have significant impact on C2 needs
- stress C2 issues
- be military credible
- be credible in terms of civil-military objectives
- facilitate the design process

*Necessary and sufficient?*



## Three C2 elements should be reflected

- C2 organisation and infrastructure, *including human issues*
- C2 processes
- C2 systems

*Complete?*

# Conclusions

- The ideal OA is scenario independent.
- In practice, this is rarely the case
- Problem dictates the contents of a scenario
- There is no universal scenario
- Scenario is part of a larger methodology
- No single scenario is sufficient

*Comments?*



## Recommendations

- Organise set of scenarios/vignettes to cover problem
- create national base of approved scenarios
- explicitly identify scenarios prior to study
- information and hypotheses on threats, adversary forces and non-combatants should be addressed.
- Explicitly identify the C2 aspects under consideration
- Identify and document key scenario assumptions

*Comments?*



# Challenges

- Standards for judging applicability and accreditation
- Scenario's for coalition C2 assessment to be developed by team of participating nations

*Comments?*



# Summary Scenarios

- Comments?
- Questions?
- Areas of concern?

## Group Discussion on “MoM and Scenarios”

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*This paper was received as a PowerPoint presentation without supporting text.*

*Paper presented at the RTO SAS Symposium on “Analysis of the Military Effectiveness of Future C2 Concepts and Systems”, held at NC3A, The Hague, The Netherlands, 23-25 April 2002, and published in RTO-MP-117.*

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